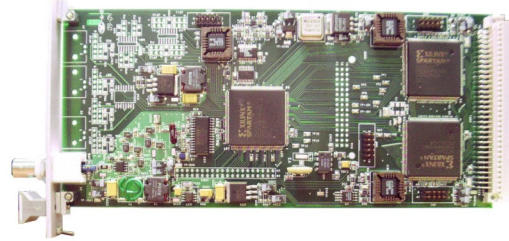




APOGEE LABS
2098 LPF2
LOW PASS FILTER MODULE



OVERVIEW

The LPF2 module is a premodulation filter. It implements an automatic tracking filter with a -3dB set point at $0.7\times$ the bit rate (or $1.4\times$ in the case of Bi-phase codes). The input serial data stream is sampled by the FIR filter which provides a constant group delay for all frequencies. The resulting values are translated back into a serial data stream by the DAC. An anti-alias filter removes the sampling noise. The only parameter that is controlled by the user is the gain selection. This module is typically used in conjunction with other test modules to create an integrated test set. Please contact factory for more details.

SPECIFICATIONS

INPUTS

- All signals are single ended
- BNC connectors
- Digital data input: TTL levels, rates from 5kbps to 5 Mbps
- NRZ-L with 0 degree clock or Bi-phase data with $2\times$ clock

OUTPUTS

- Bi-polar output
- Level set up to 2.8V p-p into 50 ohms
- 50/75 Ohm driver
- BNC connectors

FILTER

- Auto tracks input frequency
- -3dB point set $0.7\times$ bit rate (NRZ) or $1.4\times$ bit rate (Bi-phase)
- Constant delay type filter